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ABSTRACT OF THE DISCLOSURE

The invention concerns a method for automatic determination of optical parameters of a layer stack, such as layer thicknesses, refractive indices, or absorption coefficients, by comparing an optical measured spectrum acquired from one location in the layer stack to an analysis spectrum calculated on the basis of specified optical parameter values, and optimizing the calculated analysis spectrum to the measured spectrum. It is proposed herein that the acquired measured spectrum be classified on the basis of curve shape parameters that characterize the measured spectrum and are determined therefrom, and that those curve shape parameters be compared to corresponding spectrum curve shape parameters calculated for known layer stacks in order to determine (initial) values or value ranges for the optical parameters to be identified, on the basis of which the analysis spectrum or spectra for comparison with the measured spectrum is/are calculated. The invention permits a drastic reduction in computation capacity and computation time.

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(FIG. 1a)